

MONITORING STRATEGY FOR THE DUTCH NATIONAL EARLY WARNING NETWORK

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Biographical Sketch of Authors

Ad Jeuken is employed as programme manager of the Dutch national waterquality early warning network. He is responsible for the coordination among the individual monitoringstations in the network, for the contacts with important partners such as the drinking water companies and for defining the monitoring strategy in such way that the delivered information meets the information needs.

After doing a Phd in meteorology and atmospheric chemistry he started working in the field of waterquality monitoring in 2000.

Abstract

RIZA operates an early warning network (a.k.a. AQUALARM) in order to detect hazardous events on and along the rivers Rhine and Meuse on behalf of the national water authority Rijkswaterstaat that is responsible for monitoring the water quantity and quality of the main water bodies in the Netherlands. Many water quality variables are measured at least daily ranging from common physico-chemical parameters to a whole range of organic micro pollutants. Next to this, bio-alarming systems (algae, daphnids) play an important role. When preset thresholds are exceeded important partners (regional authorities, drinking water companies) are being notified. In 2001 the network has been evaluated by RIZA in cooperation with its partners and a new strategy for the coming years has been set up. The main conclusion from the evaluation is that more information can be obtained from the data produced at the early warning measurement stations next to occasional exceedence of treshholds and that there is an increasing need for such information. Therefore we have started to extend the daily screening of organic compounds. The produced inventories will be systematically used together with known or calculated charateristics (toxicity, persistence, bioaccumulation) in order to produce regularly priority lists of "ignored substances". Next to this, the effect-oriented measurements will be improved mainly by operating better biomonitors in a smarter way and by trying to assess the toxicity of unknown substances showing up in chromatograms. Last but not least cooperation on data-exchange, method-development etc. with partners in the catchment area will upgrade and aggregate the information. For instance in 2001 some important steps have been undertaken to achieve cooperation with the opening of a Dutch-German run measurement station for the Rhine and a RIZA-waterworks run station for the Meuse.